LISTING OF THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claims 1-17 (canceled)

18. (previously presented) A decoder having an input and an output, wherein the input receives a signal, which includes an encoded entropy value, wherein the decoder decodes the signal to read the encoded entropy value from the signal, and wherein the output carries a signal based upon the encoded entropy value, and wherein the decoder is configured to calculate an entropy of the signal and compare the calculated entropy to the encoded entropy value.

19. (previously presented) The decoder of claim 18 wherein the decoder is configured to detect at least one of a compression operation or a decompression operation based on the comparison.

20. (previously presented) The decoder of claim 18 wherein the decoder is configured to prevent use of a device based on the comparison.

21. (previously presented) The decoder of claim 18 wherein the decoder is configured to calculate the entropy of the signal based on a sum of probabilities.

Claims 22-31 (canceled)

32. (previously presented) A method of decoding a signal, which includes a first calculated entropy value, the method comprising:

decoding the signal to extract an ancillary code representing the first calculated entropy value from the signal;

calculating a second entropy of the signal;

comparing the second calculated entropy of the signal to the first calculated entropy value; and

providing an output based on the comparison of the second calculated entropy of the signal to the first calculated entropy value.

33. (original) The method of claim 32 wherein the signal is an audio signal.

34. (previously presented) The method of claim 32 wherein the first calculated entropy value is based on a sum of probabilities.

35. (previously presented) The method of claim 32 wherein decoding the signal comprises decoding the signal by amplitude demodulating pairs of frequencies.

36. (previously presented) The method of claim 32 wherein decoding the signal comprises determining swapping events that correspond to swapping of a spectral amplitude of at least two frequencies in the signal.

37. (previously presented) The method of claim 32 wherein decoding the signal comprises using frequency hopping.

38. (previously presented) The method of claim 32 wherein decoding the signal comprises using spectral demodulation.

39. (canceled)

40. (previously presented) The method of claim 32 wherein the output prevents playing of the signal.

41. (previously presented) The method of claim 32 wherein the entropy of the signal is based on a sum of probabilities.

Claims 42-58 (canceled)